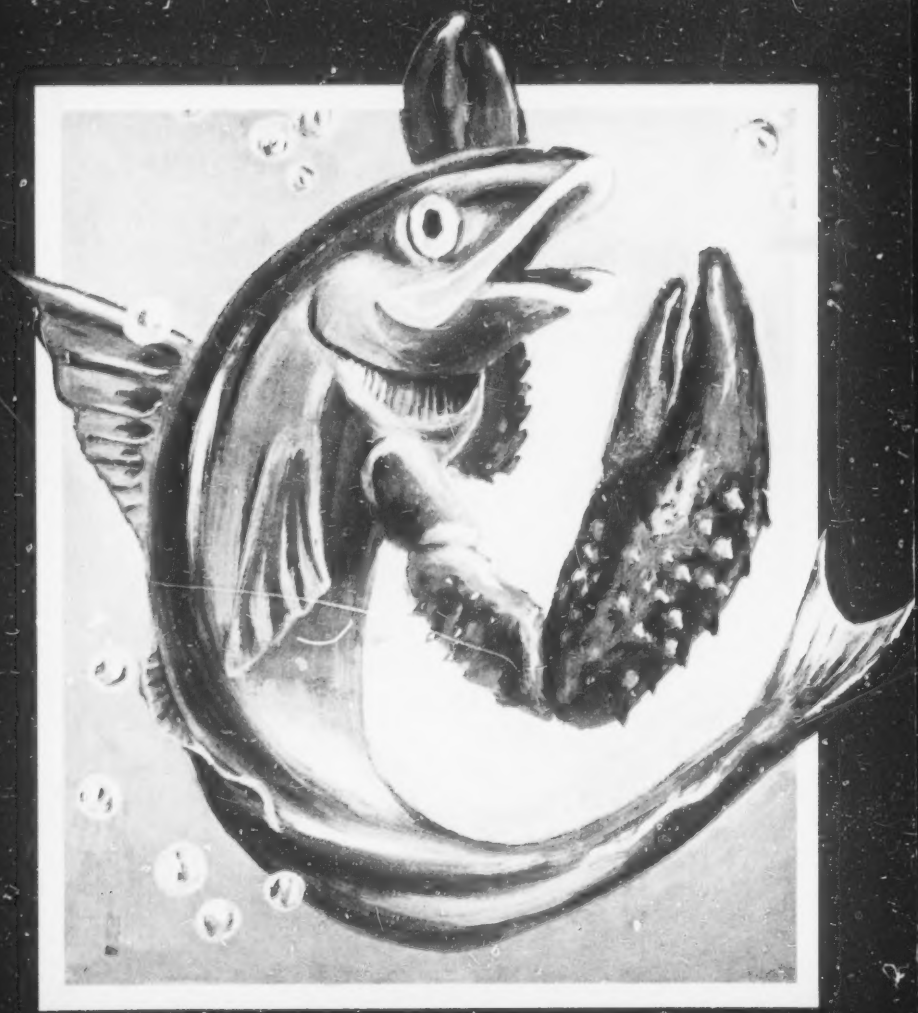
JANUARY 1986
ALASKA ECONOMIC TRENDS

Alaska Department of Labor Bill Sheffield, Governor, State of Alaska



1 Surimi Production in Alaska

Alaska Hours and Earnings for Selected Industries 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	P/ 10/85	R/ 9/85	10/84	P/ 10/85	R/ 9/85	10/84	P/ 10/85	R/ 9/85	10/84
Mining	$24.36	$24.63	$24.16	49.9	50.7	49.7	$1215.56	$1248.74	$1200.75
Construction	24.70	24.88	24.27	42.4	42.1	42.9	1047.28	1047.45	1041.18
Manufacturing	15.47	12.47	15.65	35.1	38.2	31.0	543.00	476.35	485.15
Food & Kindred Prod.	10.15	9.44	10.12	22.8	34.8	22.0	231.42	328.51	222.64
Lumber & Paper Prod.	17.76	16.23	17.61	44.1	45.3	33.9	783.22	735.22	596.98
Trans., Comm. & Utilities	16.08	15.51	15.86	37.1	40.2	37.3	596.57	623.50	591.58
Trade	11.76	11.97	10.69	33.5	34.2	34.8	393.96	409.37	372.01
Wholesale	14.86	14.94	12.86	36.8	38.0	38.0	546.85	567.72	488.68
Retail	10.45	10.66	9.84	32.3	32.7	33.7	337.54	348.58	331.61
Finance,Ins. & R.E.	—	—	—	—	—	—	399.88	422.36	399.28

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

2/ Excludes eating and drinking establishments.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and non-supervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours.

Alaska Economic Trends

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The following notes pertain to Nonagricultural Wage and Salary Employment Tables:

Government includes teachers in primary and secondary schools, and personnel employed by the University of Alaska.

Benchmark date March 1984.

P/ Denotes preliminary estimates.
R/ Denotes revised estimates.

Surimi Production in Alaska

By Kathy Thomas

An odorless, tasteless, gelatinous product is generating a lot of excitement in the fishing industry lately. A previously underutilized bottomfish is being harvested for production. The product is low in calories, 80 per 100 gram portion, low in fat, and high in protein. From this basic product innumerable different food commodities are being produced such as imitation king crab, other imitation seafood, and the potential for red meat substitutes. This product has been produced in Japan for hundreds of years and is called surimi.

Pollock is the primary fish used in production of surimi though other types of bottomfish can be used. Pollock is the preferred species because of its gelling property which is essential in high quality surimi. The fish is deboned and skinned, minced, and washed several times in pH adjusted water. It is then placed in a screwpress to remove the water. After the dewatering process it is strained to provide a uniform consistency. This product is either directly converted to a final product or a paste is made where salt, sugar, and sorbitol are added to preserve the gel strength during freezing. This final paste is formed into blocks and frozen.

To be converted into additional products the surimi is thawed and further processed. In the creation of simulated shellfish real shellfish flavoring or chemical flavorings are added. Occasionally real shellfish meat is added to enhance the product. These simulated products are called analogs in the industry. The shellfish analogs currently being produced are shrimp, crab, scallops, and lobster though crab is the most popular. Analogs of hot dogs and other meats are being experimentally produced though they are not currently commercial due to their high cost of production. Another potential use of surimi is as a high protein additive to regular foods. If surimi is substituted for ten percent of the beef in a pork-beef hot dog, the amount of fat and water lost during cooking is reduced by two-thirds. At present though the majority of the market is in seafood analogs.

The consumption of surimi in the U.S. has skyrocketed. In 1979 the U.S. consumed less than a thousand tons. By 1984, consumption increased to 30,000 tons. According to the Alaska Fisheries Development Foundation (AFDF), if surimi does not remain limited to seafood analogs consumption of surimi could increase to one billion pounds by 1990.

America is not the only country attracted to the low calorie, low fat

fish product. England has increased consumption of crab analogs by several hundred percent. Factors limiting the market at this time include confusion over labelling and, for consumers, confusion about what the product actually is. The Food and Drug Administration says that surimi based analogs must be labelled as imitation since they are nutritionally inferior while similar in appearance to real products. U.S. Customs has recategorized shellfish blended surimi thereby upping the import tariff to ten percent. Obviously there is resistance to convert to new labelling since consumers might be reluctant to purchase an 'imitation' product, but the price advantage of surimi and consumer acceptance on the basis of taste as should eventually allow consumers to overlook the word imitation.

Ninety-nine percent of the world's pollock stock is in the cold North Pacific waters of Alaska, Japan, and the U.S.S.R. Before the U.S. became interested in surimi, the Japanese caught and processed pollock aboard huge factory trawlers. With the increased interest in the bottomfishery by the domestic fishing industry, joint ventures were entered into whereby domestic trawlers sold their bottomfish catch directly to the foreign factory ships. As interest further increased in the commercial potential for this abundant bottomfish, there was a move for domestication of the industry. In response new U.S. factory trawlers are on line or are being built.

Most of the bottomfish used in surimi production is caught by trawlers. A trawler drags a net that is held open by a beam or doors. The fish are collected in an enclosed end piece of the net called the cod end. A factory trawler is generally a larger trawler that also has surimi or fillet production facilities on board.

The main resistance to developing U.S. factory trawlers is capital cost and lack of convertibility. A trawler without a surimi factory costs about $5 million. A trawler with a surimi factory can cost $8-$20 million depending on size. Once a vessel is manufactured as a factory trawler it is too difficult to transform the vessel for another type of fishing. Limitations such as these leave the domestic fishing industry hesitant to jump into the surimi business.

Another possibility being explored is shore-based processing of surimi. A prototype facility was initiated by AFDF on a grant of Saltonstall-Kennedy (federal) funds. The facility owned by Alaska Pacific Seafoods began operations January 1985 in Kodiak. The location is convenient to major bottomfish harvesting activity. The facility is capable of producing 860,000 pounds of surimi of which a portion is used for market development. By having a shore-based surimi processor, existing trawlers can be used permitting more flexibility for the fish harvesters.

It was originally thought that shore-based facilities could not produce high quality surimi and the only way to obtain high quality was with factory trawlers on the fishing grounds. This concept originated before the U.S. knew what surimi was and while the Japanese were producing surimi. Japanese trawlers caught fish in the Bering Sea and put them in refrigerated holds. A number of days elapsed before the fish were delivered to Japanese shore-based processors resulting in a deterioration of fish quality. Processing of this lower quality fish resulted in lower quality surimi. Consumers preferred fish from factory trawlers where the fish was processed shortly after being caught resulting in a higher quality product.

It was a gamble when Alaska developed a shore-based processor because of the possibility that the surimi produced would be of an inferior quality. The first batch passed all grading standards except for color. Once adjustments were made subsequent batches have been of sufficient quality to rival the factory trawlers. Because of its proximity to the fishing grounds and an existing fleet of fish trawlers freshly caught fish are delivered in matter of hours rather than in a matter of days.

The Market for Bottomfish

The development of a U.S. surimi processor is the beginning of the U.S. entry into what has previously been an exclusively foreign market. When domestic versus foreign fishing is considered this is especially important. The 1985 groundfish apportionments for the Bering Sea/Aleutian Islands include a total allowable catch (TAC) of 1,300,000 metric tons (mt) of pollock. Of that allocation 28,220 mt are for domestic production and 407,550 mt are for joint venture production, 34% of TAC. Meanwhile, total allowable level for foreign fishing is 864,230 mt, 65% of TAC. Domestic production alone with no foreign intermediary comprises only 2% of TAC. That leaves 98% for domestic catch expansion. But the potential domestic catch cannot be realized without processors or markets to accept it. The new facility in Kodiak leads the way for further expansion of a U.S. based bottomfish industry.

If the market continues to be strong for bottomfish it would be in the U.S. interest to expand domestic production capability. Presently American pollock provides a large portion of Japan's surimi production. The present market structure involves Japanese catching and processing of pollock in the U.S. fishery conservation zone. The processed surimi is then sent back to Japan for conversion to finished products. These finished products are then exported back into the U.S. Considering the potential domestic harvest of pollock and increased U.S. market for surimi the future expansion of the seafood industry is significant.

Another possibility for expansion of the bottomfish industry is increasing interest in pollock fillets. The Alaska Seafood Marketing Institute (ASMI) recently received a grant for promotion of pollock fillets. Rather than a competition to surimi, pollock fillets are viewed by ASMI as a complement to the bottomfish industry with each item targeting a different market. Price will determine which product the processors will manufacture. Product yield (the amount of usable fish after it has been cleaned and filleted) on a pollock is about 20% for both surimi and fillets so the raw material cost is the same whichever is produced. Surimi would have a cost disadvantage to fillets because of additional processing required. If surimi costs more to produce than fillets yet the wholesale price is the same, then the more profitable venture would be fillets. Since initial processing, heading and filleting, are the same, a surimi plant should be able to make the conversion between fillets and surimi easily as wholesale prices change.

Depending on the timing and assuming the possibility of a growth in production of king crab and tanner crab harvests, surimi can affect the industry in several ways. The fish harvesting fleet would benefit from greater fishing opportunities. The seasons for crab will continue to remain short, especially in the near future while the season for pollock will continue to be extended. Even if fish harvesters break off bottomfishing for the crab season, they will likely return to bottomfishing to fully utilize their boats and other resources.

A problem emerges when evaluating the retail market. Surimi is entering the market as shellfish analogs mainly for use in salads, casseroles, and in other dishes where shellfish is used as an additive rather than by itself. Surimi's importance is also growing at a time when real crab harvest and use is declining thereby filling the niche left by nonexistent crab. The possibility exists that once crab stocks rebound, surimi will decline in importance as consumers revert back to 'real' product and away from 'imitation' product.

The other possibility is that surimi will maintain its dominance in home use in salads and casseroles and in fast food restaurants that need a large, inexpensive supply of seafood analogs. Also surimi is being tested for conversion to other foods and as an additive to meat products, expanding the market beyond analogs. Real crab will reopen its markets in white tablecloth restaurants as whole and split legs. The rate and nature of the market changes will be affected by how fast crab stocks recover and the level of surimi intrusion into the market when crab is again viable.

Alaska Pacific Seafoods is currently the only domestic producer of surimi. Two other surimi producers will begin operations in Dutch Harbor sometime in 1986. Both of these new facilities are joint ventures

with Japanese companies. Ward's Cove Packing Company of Seattle is partners with Taiyo Fishery Company and Marubeni Corporation. Universal Seafoods of Seattle is partners with Nippon Suisan Kaisha of Japan. *Pacific Fishing* (August 1985 and September 1985) reports that each facility will require $10 million investment and will produce 25,000 tons of surimi a year.

According to *Seafood Business Report* (May/June 1985) a lot of the new facilities that convert surimi to finished analogs are either wholly owned subsidiaries or divisions of Japanese companies. A new facility in Seattle, Trans-Ocean Products, Inc., is the result of a joint venture between Western Alaska Fisheries, Inc., a subsidiary of Taiyo Fishing Co., Ltd. of Tokyo, and Steuart Investment Company of Washington, D.C. Another facility that will soon be producing analogs is Universal Seafoods, a division of Nippon-Suisan. Taiyo, Nippon Suisan, and Kyokuyo are responsible for the majority of Japan's surimi business. Even with the establishment of U.S. conversion plants, the Japanese still possess the lion's share of surimi and analog production. U.S. shore-based surimi factories will have to fight to get their product accepted. As it is, analog production facilities would be reluctant to relinquish firm, established, foreign suppliers for shaky, new, domestic suppliers of surimi.

The previous situation outlines the potential for vertical integration in surimi and analog production, even with a shore-based processor. One company owning a factory trawler and a conversion plant would be integrated from the point of catching the fish to producing a final retail product. A similar but slightly more complicated situation exists with a shore-based surimi factory. A company would need to own the trawlers, factory, and a conversion plant. From the previous paragraph it is seen that at least two Japanese surimi firms are vertically integrated from the factory trawler to conversion plant. The high level of Japanese integration could be disrupted with the expansion of the domestic fishing fleet and resulting increases in the U.S. share of the bottomfish allocation. As domestic pollock fishing increases and more domestic processors are brought on-line, there would be a shift to increased domestic vertical integration. The change would be gradual and could end up with various stages of interdependence between Japan and the U.S.

Employment Opportunities

As the domestic bottomfish industry expands, domestic employment in the bottomfish industry also expands. Trawlers supplying joint ventures or floating processors should not affect the employment situation. Most of these trawlers are converted king crab vessels seeking to utilize their investment. Also, an established pool of trawlers is de-

veloping in response to joint ventures. These crew members will mostly result in a shift of employment from one fishery to another.

A shore-based surimi producer employs about 24 production employees on a given day, 12 per shift and two shifts operating a day. On the average a commercial surimi facility produces 25,000 tons of surimi a year. With a pollock recovery rate of 20%, 125,000 tons of pollock would be required for each facility to produce 25,000 tons of surimi. Since the most recent pollock apportionment is 1,433,300 tons, 1,300,000 mt, the pollock resource would be completely maximized at 12 surimi factories. By using the total allocation of pollock for surimi production, 288 jobs would result. This scenario assumes that only surimi is produced, no other products such as roe, fish meal, fish oil, or fillets are produced. However, this employment estimate may be an overstatement. Surimi production is already a highly mechanized process and the trend is toward increased mechanization. As this occurs, employment will be displaced from the production process.

At the present time 11 domestic factory trawlers are plying the waters for bottomfish. they range in size from 133 feet to 338 feet with the usual size being 155 to 165 feet. They all produce fillets. No surimi is currently produced on domestic factory trawlers. A fillet line requires about the same number of employees as a surimi line, ten per shift and two shifts totaling 20 employees. Also on an average sized vessel is a crew of four to six who operate the vessel and catch the fish. Using the same technique as for surimi, given that the average factory trawler processes 15,000 mt of fillets a year, a pollock recovery rate of 20%, and a total pollock apportionment of 1,300,000, the maximum number of people who could work on factory trawlers is 425.

Employment for shore-based surimi and fillets facilities include not only production and technical employees but also support employees. Support employment manages the operations, maintains the facilities, and performs general labor. According to a study prepared by Pacific Rim Operations for the Alaska Department of Commerce and Economic Development, Office of Commercial Fisheries Development, support employment is consistent whether a plant performs several pollock processing operations or only processes surimi or fillets. A typical facility would usually have five management employees, five maintenance workers, and ten general laborers totaling 20 additional employees. From the previous calculations for surimi, the addition of 20 employees per facility would yield a total of 240 additional employees.

The same total would apply to shore based fillet operations. A lesser number of additional employees would be required for factory trawler fillet operations since a lot of the maintenance would be part of the

crew's function. However, factory trawlers would have management on shore along with other labor and maintenance employees to prepare the vessel for the next trip.

All of these calculations are based on a static pollock allotment. As more is known about the resource the outlook could change. Because pollock was underutilized, estimates of its abundance may have been too low leading to an expansion of the industry. The opposite is also true. As more vessels target pollock, the resource could be strained and begin to decline. It is hoped that judicious management will optimize the resource to provide a steady source of jobs in the bottomfishing industry.

Summary

With its concern for health, America's population has been shying away from high fat foods such as pork and beef and has been consuming more fish. In addition, a recent medical study suggested that fish oils might be beneficial in the prevention of heart disease. Increased consumption of seafood is providing the impetus for a fledgling bottomfish industry to continue to expand. Alaska, with its large populations of bottomfish, can only gain from high demand for seafood in terms of employment, income, and industrial development.

Alaska

By John Boucher

Coal Prospects—Reason for Optimism

Recent developments in the world oil market have been cause for concern for more than just a handful of Alaskans, but while these developments have cast a shadow over the future of Alaska's economy, prospects for coal development are a bright spot in Alaska's future as a world energy provider. According to a recent study published in the *Petroleum Economist*, during the last ten years world energy consumption has increased 20%, but oil demand has increased only 3% while coal consumption has increased 29%. The consensus among forecasters is that coal will play an increasing role as an energy source in the next 15 years while oil's prominence will decrease. These factors, in addition to Alaska's wealth of coal resources and it's strategic location in relation to Pacific Rim markets, point to good prospects for the future development of Alaska's coal resources.

Coal's development in Alaska was given a boost last year when the Usibelli coal mine began exporting coal from its Healy/Nenana coal fields to the Korean Electric Power Corporation. Coal exported by Usibelli in 1985 has fallen short of the 600,000 metric tons level that was expected, due to a fire in mid-November, however production is expected to reach at least that level next year. Currently, the Korean Power Corporation's contract with Usibelli permits them to take plus or minus 20% of the contract amount and the Korean's have elected to take the minimum amount allowed under the contract. Competition for Usibelli is primarily located in Canada and South Africa and both competitors have dropped prices recently. Lower competitor prices in combination with the strength of the U.S. dollar has prevented the expansion of production at Usibelli at least for the moment.

Expansion of Alaska's role in providing Far East coal supplies has improved recently. Placer-USA, formerly Placer-Amex, has been actively promoting its Beluga coal field project, which is expected to produce 1.5 million tons of coal a year. That level of production would place the Placer-USA project at a level of production very close to that of the entire Usibelli operation. Placer-USA is hoping to keep production costs low by using an existing network of logging roads and logging camp facilities, and extending an existing logging dock facility so that it would be able to handle large coal carriers. The Placer-USA project would probably serve the same type of market niche that the Usibelli project carved out, a source that would diversify the supply of coal for Far East nations and provide a hedge against future price changes by larger producers such as Australia and South Africa.

Nonagricultural Wage and Salary Employment
By Place of Work
Alaska

	P/ 11/85	R/ 10/85	Changes From: 11/84	10/85	11/84
Nonag. Wage & Salary	227400	234500	224200	-7100	3200
Mining	9600	9600	8800	0	800
Construction	16400	20900	18100	-4500	-1700
Manufacturing	8500	9700	8300	-1200	200
Food & Kindred Prod.	3200	4300	3200	-1100	0
Lumber & Paper Prod.	2100	2200	2200	-100	-100
All Other Mfg.	3200	3200	2900	0	300
Trans. Comm. & Utilities	18800	19500	18500	-700	300
Trucking & Whseing.	2300	2300	2300	0	0
Water Transportation	1200	1400	1200	-200	0
Air Transportation	6100	6400	5900	-300	200
Other Trans. Comm. & Utilities	9200	9400	9100	-200	100
Trade	46600	46600	46100	0	500
Wholesale	8800	8800	8600	0	200
Retail	37800	37800	37500	0	300
Gen. Mer. & Apparel	5500	5400	5400	100	100
Food Stores	6100	6000	6000	100	100
Eating & Drinking Pl.	14000	14100	13600	-100	400
Other Retail Trade	12200	12300	12500	-100	-300
Finance-Ins. & R.E.	13100	13200	12500	-100	600
Services & Misc.	43800	44500	43600	-700	200
Government	70600	70500	68300	100	2300
Federal	18000	18000	18000	0	0
State	21100	21100	20000	0	1100
Local	31500	31400	30300	100	1200

Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Government includes teachers in primary and secondary schools and personnel employed by the University of Alaska.

Benchmark Date March 1984

P/ Denotes Preliminary Estimates
R/ Denotes Revised Estimates

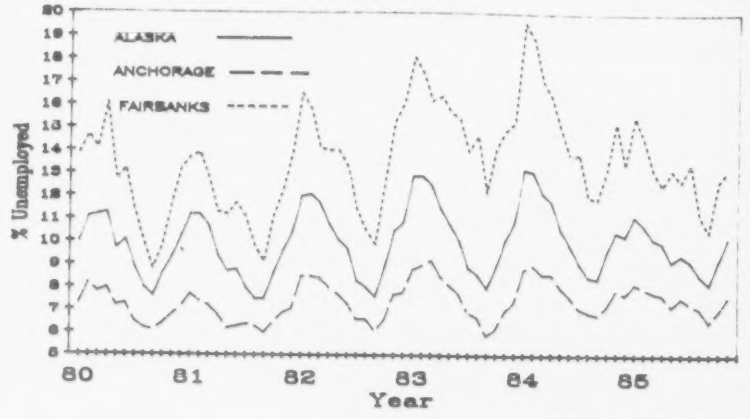
A coal export project which is three to five times the size of both the Usibelli and Placer-USA projects is now approaching a crucial stage. The feasibility of Diamond-Shamrock's Beluga coal field project, which is geared to export between five and ten million tons a year, is currently being studied by the Japan Electric Power Corporation. If looked upon favorably by the Japanese utility association, it will assist the project in obtaining contracts for coal delivery.

Even with the increasing coal market and Alaska's relatively strong reserves and logistical advantages, it would be a mistake to assume that even a well developed coal industry would have the employment and revenue impacts of the oil and gas industry. Just in terms of direct employment the coal industry would have to grow 80 to 90-fold to match current oil industry employment. The coal industry would not generate an amount of tax or royalty revenue to the state anywhere near that of the oil industry, so indirect employment would be less even if the coal industry were able to increase at that phenomenal pace. However, as oil revenues decline, every source of employment and revenue will be welcomed, and the coal industry looks to be well positioned to provide Alaska both in the future.

Current Trends

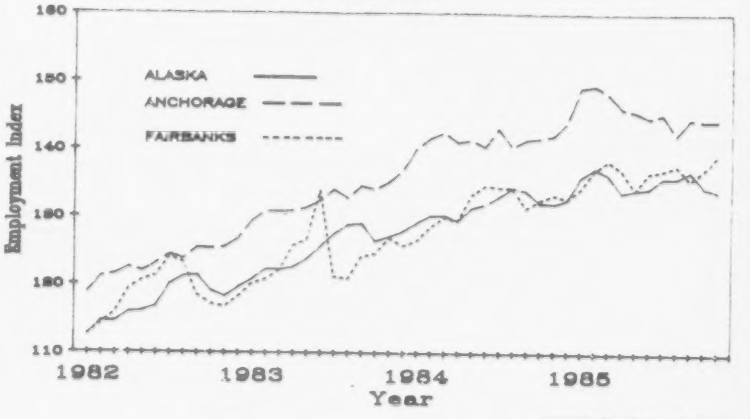
The unemployment rate for Alaska increased one full percentage point in November to 10.2%, the first double-digit unemployment rate since April of this year. The month-to-month increase in the unemployment rate can be largely attributed to the slowdown in the construction industry. Over 65% of the jobs lost in the Alaskan economy during the month were in construction, and the number of weeks of unemployment claimed by former employees of the construction industry increased by over 1,450 during the sample week. The unemployment rate continues to show slight improvement in comparison to year ago figures which points to the annual rate for 1985 being an improvement over the 1984 annual average unemployment rate of 10.2%. See the center insert for current unemployment rates for all census divisions in the state.

Unemployment Rates
Not Seasonally Adjusted
1980 to Present



source: Ak. Dept. of Labor

Composite Nonag. Employment Indexes
Seasonally Adjusted
1982 to Present



source: Ak. Dept. of Labor

Anchorage/Matsu

By Greg Huff

1986 Labor Force Outlook

With overall economic activity slowing in the Anchorage/Matsu area, changes in its labor force are inevitable. This article examines the components of the labor force and the unemployment rate. In addition, the outlook for the 1986 Anchorage/Matsu unemployment rate will be discussed.

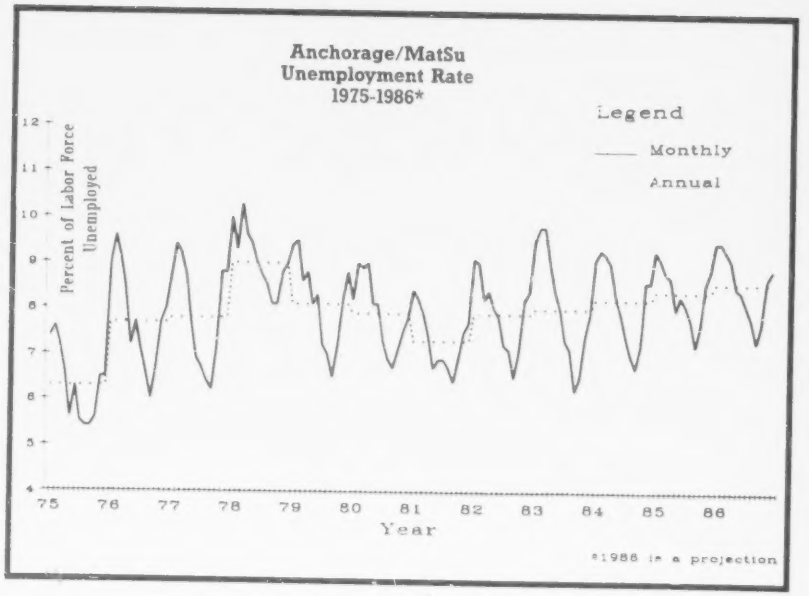
The labor force is comprised of two components, those workers employed and those unemployed but actively seeking work. Those workers unemployed and not actively seeking work are not included in the labor force statistics. Depending upon the relative movement of these two components, the unemployment rate rises or falls.

The Anchorage/Matsu unemployment rate fluctuates both with the seasons and during cyclical economic periods. For example, during the summer months the number of jobs rise dramatically in response to increased activity in the construction, seafood processing, and tourism related industries. At the same time, the number of workers without jobs falls causing the unemployment rate to decline. The opposite is true during the winter months.

One striking aspect of the unemployment rate is its decline during an economic slump and increase during an economic boom. During only two of the past ten years (1975 and 1981) did an increase in employment result in a lower unemployment rate. During the remaining years of rapid economic expansion, the unemployment rate increased because the number of people seeking work grew more rapidly than the growth in new jobs. The only other time the rate fell was in 1979 and 1980 due to the exiting of unemployed workers. Why is this trend the opposite of what might intuitively be expected?

It is commonly assumed that in-migration of job seekers to the state is the main factor. Strong statistical evidence supports this assumption. Unemployment claims filed in Alaska against other states rise dramatically during periods of economic prosperity in Alaska and the situation is particularly acute during periods of recession in other states. The opposite is true during a economic slump when many workers tend to leave Alaska.

We know employment growth will be slow in 1986, but the increase in the region's unemployed is less certain. The key to the movement



of the unemployment rate is the rate of growth in the labor force and the ability for laid-off workers to find jobs in other industries or the rate at which the unemployed leave the area in search of work elsewhere.

The unemployment rate in 1986 is projected to rise to 8.6%, slightly higher than the 1985 average of 8.4%. This will occur because of slower economic expansion and an increase in the number of unemployed due to a less active year in construction. The out-migration of laid-off workers from the Anchorage/Matsu labor force will keep the unemployment rate from increasing faster.

Current Trends

In November the construction industry remained the big over-the-year job loser. The number of construction jobs fell to 8,100 in November. This represents a 13.8% over-the-year decline. Every sector of the construction industry was affected. The Municipality of Anchorage's building permit data (through November) indicate construction valuation down 39%. The decline in the number of construction jobs is not as dramatic because the construction dollar goes further this year than a year ago. Construction bids being submitted in 1985 have consistently come in below engineers' estimates.

Nonagricultural Wage and Salary Employment
By Place of Work
Anchorage

				Changes From:	
	P/ 11/85	R/ 10/85	11/84	10/85	11/84
Nonag. Wage & Salary	114750	117450	112800	-2700	1950
Mining	4200	4200	3850	0	350
Construction	8100	10150	9400	-2050	-1300
Manufacturing	2350	2650	2300	-300	50
Food & Kindred Prod.	350	550	300	-200	50
Other Mfg.	2000	2100	2000	-100	0
Trans. Comm. & Utilities	9450	9700	8650	-250	800
Trucking & Whsemg.	1250	1250	1200	0	50
Water Transportation	400	400	400	0	0
Air Transportation	3850	4050	3300	-200	550
Other Trans. Comm. & Utilities	3950	4000	3750	-50	200
Trade	28750	28700	28100	50	650
Wholesale	6600	6650	6650	-50	-50
Retail	22150	22050	21450	100	700
Gen. Merchandise	1800	1650	1800	150	0
Food Stores	3250	3350	3200	-100	50
Eating & Drinking Pl.	8500	8650	8300	-150	200
Other Retail Trade	8600	8400	8150	200	450
Finance-Ins. & R.E.	9050	9000	8900	50	150
Services & Misc.	36150	36350	35550	-200	600
Government	26800	26700	26150	100	650
Federal	9900	9850	10050	50	-150
State	7450	7350	6950	100	500
Local	9450	9500	9150	-50	300

Nonagricultural Wage and Salary Employment
By Place of Work
Anchorage-MatSu

				Changes From:	
	P/ 11/85	R/ 10/85	11/84	10/85	11/84
Nonag. Wage & Salary	121950	125300	119550	-3350	2400
Mining	4250	4200	3850	50	400
Construction	8650	10900	10100	-2250	-1450
Manufacturing	2450	2800	2400	350	50
Trans. Comm. & Utilities	10300	10600	9350	-300	950
Trade	30500	30650	29850	-50	650
Finance-Ins. & R.E.	9200	9300	8900	-100	300
Services & Misc.	27600	27800	27050	-200	550
Government	29000	29150	28050	-150	950

Labor Force By Region and Census Area

	Labor Force			Unemployment			Rate			Employment		
	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84
Alaska Statewide	243438	247538	243079	24907	22793	25146	10.2	9.2	10.3	218531	224745	217933
Anch Matsu Region	131525	134468	130819	11254	10289	11191	8.6	7.7	8.6	120271	123179	119628
Anchorage Borough	117389	119368	116761	8858	8306	8910	7.6	7.0	7.6	108431	111062	107851
Matsu Borough	14136	14110	14058	2396	1983	2281	16.8	14.1	16.2	11840	12127	11777
Gulf Coast Region	25481	25813	25065	3442	2957	3056	13.5	11.5	12.2	22039	22856	22009
Kenai Peninsula Bor	15800	15982	15324	2351	2034	1893	14.9	12.7	12.4	13449	13948	13431
Kodiak Island Bor	5511	5966	5908	665	567	709	10.4	9.5	12.0	5206	5399	5199
Valdez-Cordova	3970	3865	3833	486	356	454	12.6	9.2	11.8	3384	3509	3379
Interior Region	33108	37922	36699	4742	4696	5078	12.8	12.4	13.8	32366	33226	31621
Fairbanks North Star Borough	30114	30762	29707	3964	3917	4160	13.2	12.7	14.0	26150	26845	25547
Southeast Fairbanks	2944	3008	2971	410	302	398	10.5	10.0	13.4	2633	2703	2573
Yukon-Koyukuk	4051	4156	4021	468	477	520	11.6	11.5	12.9	3583	3678	3501
Northern Region	8236	8513	7881	1071	963	711	13.0	11.3	9.0	7165	7550	7170
Kotzebue	2584	2643	2513	336	274	263	13.0	10.4	10.5	2248	2369	2250
Nome	3356	3454	3300	359	294	299	10.7	8.5	9.1	2999	3160	3001
North Slope Borough	2294	2416	2068	376	395	149	16.4	16.3	7.2	1918	2021	1919
Southeast Region	30988	30915	29857	3804	3148	4274	11.8	10.2	13.3	27023	27767	27783
Haines Borough	1025	949	1062	118	75	167	12.2	7.9	17.6	851	874	875
Juneau Borough	11727	11848	11993	1271	1100	1239	10.8	9.3	10.3	10460	10748	10754
Ketchikan Gateway Borough	6474	6585	7013	743	668	1120	11.5	10.2	16.0	5731	5889	5893
Prince of Wales Outer Ketchikan	2846	2804	2478	398	403	476	17.0	16.8	19.2	1947	2001	2002
Sitka Borough	4847	4961	3987	390	415	409	10.2	10.6	10.3	3451	3546	3548
Skagway-Yakutat Angoon	1655	1821	2004	275	162	344	14.6	8.9	17.2	1615	1659	1660
Wrangell-Petersburg	3376	3377	3850	408	327	499	12.1	9.7	14.1	2958	3050	3051
Southwest Region	10462	10907	10558	795	740	836	7.6	6.8	7.9	9667	10167	9722
Aleutian Islands	2496	2626	2535	74	78	99	3.0	3.0	3.9	2422	2548	2436
Bethel	4120	4313	4160	385	385	404	9.3	8.9	9.7	3735	3928	3756
Bristol Bay Borough	411	433	416	31	33	34	7.5	7.6	8.2	380	400	382
Dillingham	1741	1783	1737	139	98	125	8.0	5.5	7.2	1602	1685	1612
Wade Hampton	1694	1752	1710	166	146	174	9.8	8.3	10.2	1528	1606	1536

P Preliminary R/ Revised 1984 Benchmark

Federal guidelines require the use of unrounded labor force data adjusted to be consistent with the Current Population Survey (CPS) in formulas used to allocate federal funds. Comparisons between different time periods are not as meaningful as other time series published by the Alaska Department of Labor, because Alaska's CPS sample size is inadequate to accurately indicate monthly changes in level. The sampling errors are random in nature, meaning that the unemployment rates, in any given month, are as likely to be high as frequently as they are low. The official definitions of unemployment, currently in place, exclude anyone who has made no attempt to find work in the four week period up to and including the week that includes the twelfth of each month. Most economists feel that Alaska's rural localities have proportionately more of these discouraged workers.

Most industries experienced seasonal employment declines in November except for those gearing up for the Christmas buying season. A wide variety of stores in the general merchandise and other retail trade categories have increased their staffing levels. More often than not the Thanksgiving season induces some employment gains in the food stores and some losses in the restaurants, but this season was somewhat atypical because food store employment fell. A late Thanksgiving this year may have been responsible for this. Small increases in the food store employment are likely to appear in the December numbers.

Anchorage/Matsu
Labor Force Statistics
1975-1986

	Labor Force	Employment	Unemployment	Unemployment Rate
1975	70723	66294	4429	6.3%
1976	73547	67867	5681	7.7%
1977	83993	77406	6587	7.8%
1978	89076	81027	8049	9.0%
1979	89718	82429	7289	8.1%
1980	92529	85254	7275	7.9%
1981	98208	91061	7147	7.3%
1982	108564	99949	8615	7.9%
1983	122509	112685	9825	8.0%
1984	130147	119512	10635	8.2%
1985	135467	124124	11343	8.4%
1986	138601	126651	11950	8.6%

Fairbanks/Interior

By Neal Fried

Construction—More Resilient than Expected

Much of the state had a decline in construction activity in 1985, but Fairbanks had a substantial increase. Falling state capital expenditures and residential and commercial overbuilding caused the decreases in most of the state. Construction employment statewide declined by 2% in 1984 and is predicted to decline another 6% by the end of 1985. Fairbanks' construction employment, on the other hand grew for the fifth straight year.

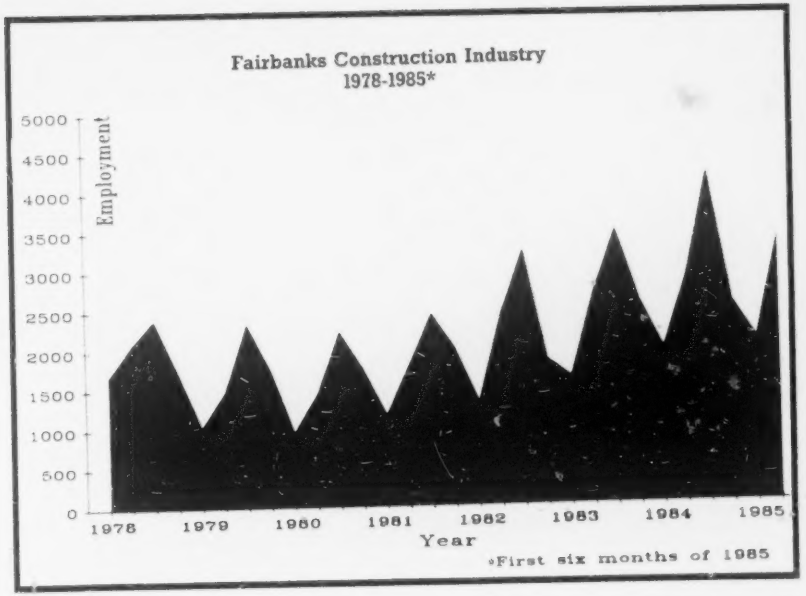
New data for construction in Fairbanks for the first six months of 1985 became available recently and indicated 12% growth over 1984. Estimates for construction employment prior to the availability of this data indicated very little growth. Most economy watchers believed construction activity was at 1984 levels or slightly higher. The degree of the construction industry's growth in employment in 1985 came as a surprise.

A booming commercial construction sector is largely responsible for this growth. Data produced by the Fairbanks North Star Borough's Community Research Center show commercial construction valuation up by 80% over 1984. This sets a new record for Fairbanks. New retail space topped the list of new commercial construction, but other commercial space such as office and entertainment center space also contributed to this industry's growth.

Home construction was another source of growth for the industry. If only building permit data (first ten months of 1985) were used, home construction declined in Fairbanks by 25% compared to a 40% decline statewide. However, if the construction of 400 homes on Eielson Air Force Base were counted in the permit data, 1985 home construction numbers would have actually topped last year's numbers by 19%. Demand for housing in Fairbanks has remained relatively robust because of strong population growth. Fairbanks also has not had to contend with a massively overbuilt housing market like a number of communities in the state.

Fairbanks' state capital budget appropriation in 1985 was below the average for the past five years, but it was still a substantial $71 million. Capital construction during the 1985 season was also impacted by the record capital budget appropriation made in 1984.

With all this activity Fairbanks has managed to increase construction



employment while other major communities and statewide construction have suffered declines in construction employment. Fairbanks may be able to continue growth in construction in the near future given the prospects of the military-related construction and to an extent increased North Slope activity. (See December's *Alaska Economic Trends* for the forecast of employment growth in Fairbanks.)

Current Trends

During the Christmas season many retail trade firms expand employment. Though individual retailers are often reporting smaller sales than in previous seasons, it is not because Fairbanks residents are spending less, but because they can now spend their Christmas dollars in more places. Because of the rapid growth of this industry over the past four years, competition has become far more intense.

November's employment figures for retail trade registered gains of 400 over year-ago levels. However November's figures are the same as October's. This may initially appear surprising because one would expect retail employment to climb in November during the Christmas rush when many retailers hire temporary help for the season. Many retailers gear up for the Christmas season but others cut employment because of seasonal changes. With the tourist season ending, the restaurant and bar businesses actually lose employment

Nonagricultural Wage and Salary Employment
By Place of Work
Fairbanks

	P/ 11/85	R/ 10/85	11/84	Changes From: 10/85	11/84
Nonag. Wage & Salary	29150	30000	27850	-850	1300
Mining	150	200	200	-50	-50
Construction	2850	3400	2700	-550	150
Manufacturing	550	600	500	-50	50
Trans. Comm. & Utilities	2750	2850	2600	-100	150
Trucking & Whseing	450	400	400	50	50
Air Transportation	850	850	700	0	150
Other Trans. Comm. & Utilities	1450	1600	1500	-150	-50
Trade	6200	6250	5850	-50	350
Wholesale	1000	1050	1050	-50	-50
Retail	5200	5200	4800	0	400
Gen. Mer. & Apparel	550	600	550	-50	0
Food Stores	850	850	800	0	50
Other Retail Trade	3800	3750	3450	50	350
Finance-Ins. & R.E.	1000	1000	950	0	50
Services & Misc.	5650	5600	5450	50	200
Government	10000	10100	9600	-100	400
Federal	2800	2900	2600	-100	200
State	4350	4300	4200	50	150
Local	2850	2900	2800	-50	50

Nonagricultural Wage and Salary Employment
By Place of Work
Interior

	P/ 11/85	R/ 10/85	11/84	Changes From: 10/85	11/84
Nonag. Wage & Salary	33450	34400	32200	-950	1250
Mining	300	300	300	0	0
Construction	3000	3600	2850	-600	150
Manufacturing	600	650	500	-50	100
Trans. Comm. & Utilities	3400	3550	3300	-150	100
Trade	6650	6650	6250	0	400
Finance-Ins. & R.E.	1100	1100	1050	0	50
Services & Misc.	5950	5900	5750	50	200
Government	12450	12650	12200	-200	250

during most of the winter. Construction-related retail trade, such as building supply outlets, also reduce their employment for the winter. The end result is relatively stable employment in retail trade during November and December.

Gulf Coast

By Neal Fried

Kenai Peninsula Borough's Economic Outlook--1986

The Kenai Peninsula Borough's economy will grow again in 1986 for the eighth straight year. Employment is predicted to grow 4 to 5% in 1986, more than twice the rate of growth forecast for Alaska and Anchorage. Though this represents strong growth, it also indicates that the Borough's economy is beginning to slow. In 1985, employment during the first six months has grown 8.9% after an increase of 9.6% in 1984. Smaller petroleum revenues and the peaking of a construction cycle are largely responsible for this slowdown in the Peninsula's economy.

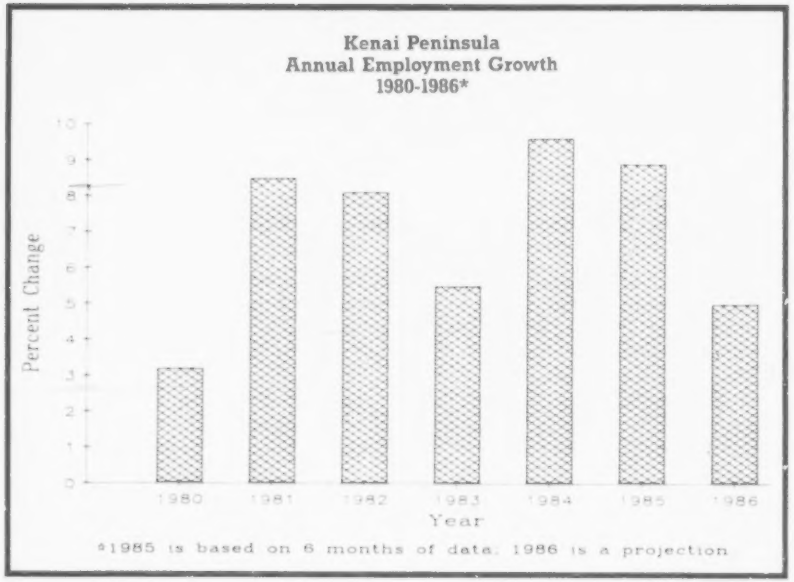
Employment in all of the larger communities on the Peninsula will grow in 1986. The Kenai-Soldotna area and Homer will make modest gains in employment while construction of the prison and associated speculative activity should push Seward to the forefront of employment growth.

Construction

Building permit data for residential construction for the first nine months of 1985 indicate a small decline over 1984 levels. In 1986 Seward may be the only community to show an increase in the number of building permits issued. Elsewhere on the Peninsula a healthy inventory of homes for sale and vacant rentals already exists.

Commercial-related construction also appears to have peaked in 1985. The construction of the new Fred Meyer store in Kenai, three new hotels on the Peninsula, and a number of other retail and service related establishments will keep many of the area's construction workers employed in 1986, but it will not provide a stimulus for growth.

Though public dollars statewide for construction have fallen because of smaller capital budgets, a number of larger projects will begin on the Peninsula in 1986. Some of these projects are partially funded from capital budgets made during past years and others are a result of bond issues. The two largest projects of this construction season are the $30.8 million prison in Seward and the $356 million Bradley Lake hydroelectric dam. The peak labor force for both of these projects combined could reach 400 during this year's construction season. The construction of four new schools and two school expansions valued at $82 million will further bolster public construction.



Manufacturing

Fish processing employment rebounded in 1985 because of record salmon runs in Cook Inlet. Another good season is projected for 1986 which means employment may grow again. The poor shellfish harvest continues to plague the fishing industry.

Oil-related manufacturing grew slightly in 1985 as a result of the expansion of the Tesoro refinery. Employment in oil refining in 1986 is expected to remain stable.

Mining-Oil

Oil industry employment increased in 1985 and may increase again in 1986. A busy year on the North Slope should provide more activity to some of the Kenai oil service companies. Marathon Oil plans to establish a new gas platform this year in Cook Inlet. Although they plan to hire few new workers, the building of the platform will contribute to the growth of this industry.

Retail Trade and Services

Retail trade employment surpassed manufacturing employment in 1985 making it the largest private industry employer on the Peninsula. It has also been the fastest growing industry and though it will not grow as fast as it did in 1985 (22% for the first six months), it will be a major contributor to employment growth in 1986. Service-related employment will also grow, but at a far slower pace than retail trade. Both these industries will benefit from a growing population and a predicted good tourism season. A weaker dollar will keep more American tourists in the U.S. and possibly attract more foreign tourists. Small population gains in Anchorage will mean Alaskan tourists will produce less growth than in past years.

Nonagricultural Wage and Salary Employment
By Place of Work
Gulf Coast

			Changes From:		
	P/ 11/85	R/ 10/85	11/84	10/85	11/84
Nonag. Wage & Salary	19900	20750	19650	-850	250
Mining	800	800	800	0	0
Construction	1900	2400	1800	-500	100
Manufacturing	2350	2500	2350	-150	0
Food & Kindred Prod.	1700	1800	1750	-100	-50
All Other Mfg.	650	700	600	-50	50
Trans. Comm. & Utilities	1950	2100	2150	-150	-200
Trade	3750	3650	3300	100	450
Wholesale	500	500	450	0	50
Retail	3250	3150	2850	100	400
Finance-Ins. & R.E.	650	700	650	-50	0
Services & Misc.	3100	3150	3000	-50	100
Government	5400	5450	5600	-50	-200
Federal	550	550	500	0	50
State	1600	1700	1650	-100	-50
Local	3250	3200	3450	50	-200

Government

Federal employment should remain stable in 1986. Both state and local employment is expected to increase slightly because of a growing population. Large gains, such as those made in past years, are not likely because of a predicted no-growth state budget.

Current Trends

The unemployment rates for all the areas within the Gulf Coast region have increased to the double digit level. The seasonal downswing is gaining momentum and no turnaround will occur until March or April. All but two industries in the region lost employment in November. There was a total loss of 850 jobs.

Construction employment remained unchanged and retail trade employment increased. Retail trade grew in November as a result of the Christmas season. Fish processing employment fell slightly but remained close to last year's level. The tanner crab season usually lasts through December but was closed early this year because there were far more boats fishing this year and the crabs were not as plentiful as first predicted. The shorter season did not affect November's numbers, but it will adversely affect employment in December.

Southeast Alaska

By John Boucher

Second Quarter 1985 ES-202 Released

The Alaska Department of Labor recently made available the ES-202 employment counts for the second quarter of 1985 (April, May, and June). The ES-202 numbers differ from the numbers published monthly in *Alaska Economic Trends* because they are derived from different methodologies. The Current Employment Statistics (CES) numbers published monthly in *Alaska Economic Trends* are estimates based on a sample of employers while ES-202 numbers are the product of unemployment insurance tax records. Since the ES-202 employment counts are the closest that the Department of Labor can come to an actual head count, the ES-202 series is the final official number published for nonagricultural wage and salary employment. Final tabulation and editing of the data usually results in a lag of three to six months following the release of the CES estimates for the like time period. The ES-202 figures are published quarterly in the Department of Labor's *Statistical Quarterly*.

The release of ES-202 data often brings to light trends that were not apparent in the sample of employers. Occasionally the data runs counter to what the employer survey and judgement has led the analyst to believe about an industry. Indications throughout the summer months have been that the construction industry in Southeast Alaska has been down significantly from the levels of a year ago, especially in the building construction sector, which includes residential and commercial building. Building permit activity was down in Southeast Alaska throughout the entire summer, a glut of residential and commercial space was apparent in the capital city, and a number of large projects were on line last year that didn't contribute any construction employment this year. These factors, combined with a decline in the employer sample, pointed to a decrease in Southeast Alaska construction employment in the 15 to 18 percent range. However, at least through June, this assessment of construction proved to be too pessimistic. Stronger employment in the residential and special trades areas of construction have kept the employment drop in construction over the year close to 10%. Table 1 is a comparison of the original estimates of employment in Southeast Alaska and the levels to which they will be revised following the benchmarking process in January.

Except for construction, the overall estimates of employment in Southeast Alaska were fairly accurate. Manufacturing employment had very little error at the major industry level, however that was due in part to compensating errors in food and kindred products employ-

Nonagricultural Wage and Salary Employment
By Place of Work
Southeast Alaska

	P/ 11/85	R/ 10/85	11/84	Changes From: 10/85	11/84
Nonag. Wage & Salary	28150	29050	28550	-900	-400
Construction	1450	1650	1800	-200	-350
Manufacturing	2400	2700	2350	-300	50
Food & Kindred Prod.	300	700	450	-200	-50
Lumber & Paper Prod.	1700	1750	1650	-50	50
All Other Mfg.	200	250	250	-50	-50
Trans. Comm. & Utilities	1800	1900	1950	-100	-150
Trade	4650	4800	4850	-150	-200
Wholesale	350	400	400	-50	-50
Retail	4300	4400	4450	-100	-150
Finance-Ins. & R.E.	1050	1100	1100	-50	-50
Mining, Services & Misc.	4450	4550	4500	-100	-50
Government	12350	12350	12000	0	350
Federal	2150	2150	2000	0	150
State	5550	5550	5400	0	150
Local	4650	4650	4600	0	50

ment and lumber and paper products employment estimates. The lumber industry had a better summer than early indications had pointed to while the fishing industry was weaker than had been anticipated. It is useful to point out here that the final evaluation for these two industries for 1985 will hinge on their performances in the third quarter of the year. The lumber and paper products had a rough July, August and September with plants closing and interruptions of production while the fishing industry had record salmon runs which hit primarily during these three months.

The secondary industries of trade and services were both overestimated in terms of the employment growth they experienced during the second quarter. Overestimation of retail trade growth was due to the an unusual decline in retail activity during the last half of 1984. Normally, other retail trade activity, which includes everything except food stores and eating and drinking establishments, loses 10% of its total employment between the months of June and January. During the second half of 1984, this sector lost 20.6% of its total employment, 5.6% more than any previous drop from January to June. The unusual drop can be explained by the opening of a large retail outlet in the summer of 1984 in Juneau which forced retailers in Juneau to become more competitive and more efficient with a drop in employment the result.

The overestimation in services came predominantly in the miscellaneous category that is seldom mentioned. The miscellaneous category

includes an estimate of employment in establishments that have yet to be classified into an industry category by the Department of Labor. During the second quarter, the unclassified employment was overestimated by more than 150, which accounted for over 60% of the difference between the estimate and the ES-202 number for services. The slowdown in the creation of new business and the catching up by the Department of Labor's classification process accounts for the difference.

Table 1
Comparison of CES Estimate to ES-202 by Industry
Second Quarter 1985

	CES Estimate	ES-202 Actual
Nonag. Wage and Salary	30009	29864
Construction	1559	1750
Manufacturing	3335	3346
Food & Kindred Products	957	858
Lumber & Paper Products	2135	2269
All Other Manufacturing	243	225
Transportation, Communication & Utilities	2101	2161
Trade	4887	4629
Wholesale	396	392
Retail	4481	4237
Finance-Ins. & Real Estate	1093	1121
Mining, Services & Misc.	4767	4534
Government	12266	12320
Federal	2093	2091
State	5655	5665
Local	4518	4555

Current Trends

Southeast Alaska wage and salary employment decreased by 900 jobs in the month of November to 28,150, the decrease in employment was spread across all industries. The only industry which did not experience a drop in employment during the month was government. One bright spot in the Southeast economy during the month was the rebound of lumber and paper products due to the restaffing of the Sitka pulp mill. Unemployment in the region climbed to 11.8%, but it is still below last year's rate.

Hours and Earnings

By Kathy Thomas

Per Capita Personal Income

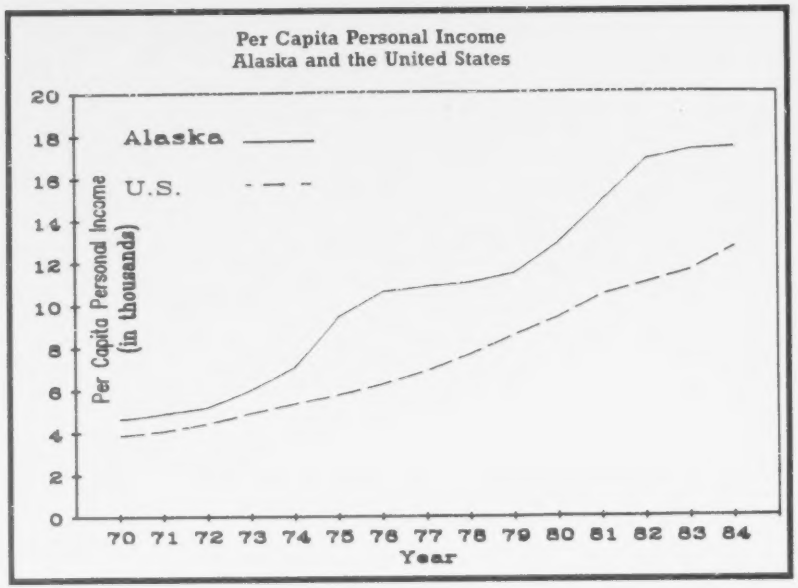
Alaska's per capita personal income was $17,487 in 1984,the highest of any state in the U.S. Per capita personal income is total personal income divided by total population. The calculation is performed by the U.S. Department of Commerce Bureau of Economic Analysis (BEA), for each state as well as the nation. National personal income includes U.S. citizens working overseas while state personal income contains no such adjustments. The components of personal income are wages and salaries, proprietors' income with inventory valuation and capital consumption adjustments, personal dividend income, personal interest income, rental income with capital consumption adjustment and transfer payments. Personal contributions for social insurance are subtracted.

Another adjustment made in the calculation of personal income is for residency. According to BEA methodology the adjustment is calculated by adding the income of residents who live in the measured census area but work in another census area and subtracting the income of those who work in the measured census area but live in another area.

Alaska per capita income is consistently higher than U.S. per capita income although Alaska's rates of growth have varied more than U.S. levels. The varying rates of growth give the illusion that Alaska is a 'boom and bust' state, however, since 1970 growth in per capita income has been consistently positive. Though Alaska may experience periods of rapid income growth, the corresponding periods of decline do not follow. Rather the periods of rapid growth have been followed by periods of slower growth.

The first period of rapid income growth began in 1973 when per capita income grew from $5,285 to $6,104, 15.5% in one year. During the construction of the Trans Alaska Pipeline, per capita income grew rapidly from 1973 to 1976, with the greatest percent increase in 1975. Per capita income increased 109.9% from 1972 to 1976. An increased labor force with high wages led to an increase in wholesale and retail trade transactions which also increased proprietors' income.

After the pipeline was completed income growth slowed considerably from the double digit levels. No industry was in place after completion of the pipeline that could sustain that high level of activity. For the three years, 1977 through 1979, the rate of growth was 2.3%, 1.7%, and 3.9% respectively.



Beginning in 1980 the rate of growth again rose above 12%. Once the oil began to flow through the pipeline and the State of Alaska began collecting tariffs, another phase of rapid expansion of per capita income began. In an effort to improve infrastructure, the state began spending oil revenues on capital improvement projects such as road systems, school construction, and hydroelectric projects. This spending boosted Alaska's total personal income and hence per capita personal income.

Another impetus to construction during this period, at least in Juneau, was the final vote on the capital move issue. Following the vote, pent-up demand for housing and office space caused the construction industry to surge. As employment increased, wages and salaries increased thereby increasing personal income.

Total personal income in the state of Alaska is an important force in the state's economy. In 1984, total personal income was $8,739,000,000. However, Alaska's total income affects the national economy very little. Alaska's total personal income is only 0.2% of national total personal income reflecting Alaska's smaller population base compared to other areas of the country.

Current Trends

The lumber and paper products sector of manufacturing changed more than any other industry this month. Average hourly earnings in lumber and paper products declined 8.5% from October to November. One reason for this decline was a change in sample mix. A major pulp mill that had been shut down began full operations in November. By increasing the relative importance of the pulp mill sector of the sample, the proportion of the sample representing logging is decreased. A second reason for the decline in average hourly earnings is a renegotiated contract for a major firm that decreased hourly wages for production workers. These two reasons combined pushed overall average hourly earnings down in lumber and paper products.

Total and Per Capita Personal Income
Alaska and United States
1970-1984

	Alaska Total (Million)	U.S. Total (Million)	Alaska Per Capita	% Chg.	U.S. Per Capita	% Chg.
1970	$1,438	$803,922	$4,726		3,945	
1971	1,579	861,904	4,989	5.6	4,167	5.6
1972	1,726	944,852	5,285	5.9	4,515	8.4
1973	2,034	1,058,902	6,104	15.5	5,010	11.0
1974	2,475	1,162,203	7,180	17.6	5,448	8.7
1975	3,544	1,258,643	9,554	33.1	5,842	7.2
1976	4,216	1,385,201	10,725	12.3	6,367	9.0
1977	4,358	1,534,708	10,968	2.3	6,984	10.0
1978	4,485	1,726,185	11,150	1.7	7,772	11.3
1979	4,674	1,942,655	11,585	3.9	8,651	11.3
1980	5,238	2,156,715	13,007	12.3	9,494	9.7
1981	6,230	2,420,098	14,979	15.2	10,544	11.1
1982	7,517	2,575,759	16,912	12.9	11,113	5.4
1983	8,358	2,735,829	17,364	2.3	11,690	5.2
1984	8,739	3,020,259	17,487	0.7	12,789	9.4

Source: U.S. Department of Commerce, Bureau of Economic Analysis

Alaska Hours and Earnings for Selected Industries 1/ 2/

	Average Hourly Earnings			Average Weekly Hours			Average Weekly Earnings		
	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84	P/ 11/85	R/ 10/85	11/84
Mining	$24.81	$23.95	$24.15	51.5	50.1	50.9	$1277.72	$1199.90	$1229.24
Construction	23.33	24.08	24.42	39.6	46.7	37.5	923.87	1124.54	915.75
Manufacturing	13.87	14.52	14.58	32.1	37.2	33.4	445.23	540.14	486.97
Food & Kindred Prod	9.69	10.65	9.09	22.6	28.9	28.9	218.99	307.79	262.70
Lumber & Paper Prod	14.90	16.29	18.52	35.8	45.2	30.2	533.42	736.31	559.30
Trans., Comm. & Utilities	15.91	15.86	15.35	37.4	38.1	36.8	595.03	604.27	564.88
Trade	11.50	11.64	10.78	33.2	33.7	34.4	381.80	392.27	370.83
Wholesale	14.24	14.58	12.91	37.4	37.6	39.1	532.58	548.21	504.78
Retail	10.28	10.35	9.90	31.6	32.2	32.8	324.85	333.27	324.72
Finance-Ins. & R.E.	—	—	—	—	—	—	418.94	422.49	417.55

1/ Prepared in cooperation with the Bureau of Labor Statistics, U.S. Department of Labor.

2/ Excludes eating and drinking establishments.

AVERAGE HOURS AND EARNINGS SERIES: Averages are based on data for full and part time production workers (manufacturing) and nonsupervisory workers (nonmanufacturing) and are for gross earnings and hours paid, including overtime pay and hours